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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/597,578

07/31/2006

Julie Baker

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1333 7590 04/30/2009
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EXAMINER

MARTIN, LAURA E

ART UNIT

PAPER NUMBER

2853

MAIL DATE

DELIVERY MODE

04/30/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/597,578	Applicant(s) BAKER ET AL.	
	Examiner LAURA E. MARTIN	Art Unit 2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The Non-Final Rejection dated 01/08/2009 has been withdrawn in view of the below rejection based on the amended claims dated 07/31/2006. The claims with the later filing date of 03/07/2008 were the original PCT claims; therefore, the objections made in the original rejection have been withdrawn.

Information Disclosure Statement

Acknowledgement is made of the information disclosure statement (IDS) submitted on 31 July 2006. The submission is in compliance with the provisions of 37 CFR 1.97.

Specification

The abstract of the disclosure is objected to because it contains the word “comprising”. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haruta et al. (JP 58-136482 A).

Haruta et al. disclose the following claim limitations:

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As per claim 1: an ink jet receiver comprising a voided polymer ink-receiving layer (figure 3, element 1); printing an image onto an ink jet receiver using a printer to generate a print and applying pressure and/or heat to the print and thereby improving the surface properties (constitution).

Haruta et al. do not specifically disclose loading the ink jet printer with an ink jet receiver; however, It would have been obvious to one of ordinary skill in the art at the time of the invention that if an image was formed onto a receiver by means of an ink jet printer, the receiver must be loaded into the printer.

As per claim 2: the application of pressure and/or heat to the print reduces the roughness and increases the gloss of the surface of the print (constitution – melting reduces roughness by allowing the surface to disperse evenly).

As per claim 3: the voided polymer ink receiving layer is a foamed polymer ink receiving layer (the voids that form a porous layer would be equivocal to foam – foam is not defined in the claim language).

As per claim 9: the application of pressure and/or heat to the print is carried out using a fusing device. It would have been obvious to one of ordinary skill in the art at the time of the invention that if the top layer was melted, it would be fused together in some way. The device that causes this melting would be the fusing device.

As per claim 10: an ink jet print (purpose).

As per claim 11: use of a fusing device to improve the surface properties and/or image properties of an ink jet print formed on an ink jet receiver comprising a foamed polymer ink receiving layer by applying heat and/or pressure to the surface of the print (purpose/constitution).

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The voids that form a porous layer would be equivocal to foam – foam is not defined in the claim language. It would have been obvious to one of ordinary skill in the art at the time of the invention that if the top layer was melted, it would be fused together in some way. The device that causes this melting would be the fusing device.

Claims 4-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haruta et al. (JP 58-136482 A) in view of Iwasa et al. (US 2002/0012786 A1).

Haruta et al. disclose the following claim limitations:

The method of claim 1.

Haruta et al. do not disclose the following claim limitations:

As per claim 4: the polymer is a hydrophilic polymer.

As per claim 5: the polymer is selected from PVA, PEO, PVP, and gelatin.

As per claim 6: the receiver is obtainable by coating a support with a solution comprising a hydrophilic polymer and a blowing agent; and either, prior to or after the step of coating the support, interacting with said solution, to cause the blowing agent to generate gas bubbles within the solution causing foaming of said hydrophilic polymer.

As per claim 7: the step of interacting with the solution is performed after the coating of the solution onto the support and comprises applying heat to said solution.

Iwasa et al. disclose the following claim limitations:

As per claim 4: the polymer is a hydrophilic polymer [0012].

As per claim 5: the polymer is selected from PVA, PEO, PVP, and gelatin [0018].

As per claim 6: the receiver is obtainable by coating a support with a solution comprising a hydrophilic polymer and a blowing agent; and either, prior to or after the step of coating the support, interacting with said solution, to cause the blowing agent to generate gas bubbles within the solution causing foaming of said hydrophilic polymer [0053]-[0054] (foaming agent = blowing agent).

As per claim 7: the step of interacting with the solution is performed after the coating of the solution onto the support and comprises applying heat to said solution [0071].

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method taught by Haruta et al. with the disclosure of Iwasa et al. in order to provide higher quality images through faster ink drying.

As per claim 8: Haruta et al. as modified discloses the claimed invention except for the weight of a blowing agent is about 10% to about 60%. It would have been obvious to one having ordinary skill in the art at the time the invention was made to vary the amount of the blowing agent in the ink composition, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LAURA E. MARTIN whose telephone number is (571)272-2160. The examiner can normally be reached on Monday - Friday, 7:00 - 3:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D. Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/L. E. M./
Examiner, Art Unit 2853

Laura E. Martin

/Manish S. Shah/
Primary Examiner, Art Unit 2853